

COPTOPS FUSCA, Oliv. ?

A single specimen from Maroe which I cannot separate from the African *C. fusca*, and which is therefore doubtlessly introduced.

SYMPHYLETES PEDICORNIS, Fabr.

An Australian species introduced.

Hab. Maroe.

PRAONETHA PLEURICAUSTA, Pascoe.

I can see no difference between the specimen brought by Mr. Forbes and that described by Mr. Pascoe from Port Albany, N. Australia.

Hab. Maroe.

CHRYSOMELIDÆ.

PHYLLOCHARIS CYANIPES, Fabr.

This species occurs in Australia, New Guinea, Bouru, &c.

Hab. Maroe.

EXPLANATION OF PLATE XVI.

- Fig. 1. *Diaphætès rugosus*, p. 214. *a*, labrum; *b*, labium; *c*, maxilla.
 2. *Cyphogastra splendens*, p. 215.
 3. *Bostrichus æqualis*, p. 215.
 4. *Archetypus castaneus*, p. 217.
 5. *Nemophas forbesi*, p. 218.

4. On the Lepidoptera collected by the late W. A. Forbes on the Banks of the Lower Niger.—RHOPALOCERA by F. D. GODMAN and O. SALVIN. HETEROCERA by H. DRUCE.

[Received March 28, 1884.]

(Plate XVII.)

RHOPALOCERA.

The collection of Butterflies made by the late W. A. Forbes during his expedition to the Niger, contains fifty species, and comprises representatives of all the Families of Rhopalocera hitherto known from Tropical Africa except the Erycinidæ, a group but feebly developed in this region.

The specimens of this collection are generally in poor condition and have the appearance of having been captured at a season when fresh examples were not to be obtained. From this cause, and probably also from the low-lying nature of the country, many of the more conspicuous species known from the adjoining districts of Old Calabar and the Camaroon Mountains, are absent from the present collection.

On comparison with the Lepidopterous Faunas of the places just mentioned, and we may also say of the West coast of Africa generally,

we detect no signs of any notable peculiarities; indeed the majority of the species are also found over a wide extent of the African continent, some spreading to the Cape Colony, others to East Africa, and even to the valley of the Nile and Abyssinia.

We have ventured to describe as new two species of *Acræa*, both rather obscure forms, of one of which we have long possessed several examples.

N Y M P H A L I D Æ.

DANAINÆ.

1. DANAIIS ALCIPPUS.

Papilio alcippus, Cram. Pap. Ex. t. 127. f. E, F.

Danaïis alcippus, Butl. P. Z. S. 1866, p. 46.

Several specimens of this form of *D. chrysippus*, agreeing with others from Abyssinia and elsewhere.

SATYRINÆ.

2. MYCALESIS VULGARIS.

Mycalesis vulgaris, Butl. Cat. Sat. B. M. p. 130, t. 3. f. 2.

A single specimen, agreeing with the type in the British Museum.

3. MYCALESIS DOLETA.

Mycalesis doleta, Kirby, Proc. Roy. Dubl. Soc. (2) ii. p. 336 (1880).

Agrees with specimens thus named in the British Museum.

4. MYCALESIS DESOLATA.

Mycalesis desolata, Butl. Ann. & Mag. Nat. Hist. (4) xviii. p. 480.

Compared with Mr. Butler's types from Abyssinia.

5. MYCALESIS RÆSACES.

Mycalesis ræsaces, Hew. Ex. Butt. (*Mycalesis*), t. 8. f. 51, 52.

Agrees with Old-Calabar specimens whence Hewitson's types were derived.

6. YPHTHIMA ITONIA.

Ypthima itonia, Hew. Trans. Ent. Soc. (3) ii. p. 287, t. 18. f. 13.

Hewitson's types came from the White Nile. They differ from Forbes's specimens in having the submarginal ocelli of the secondaries decidedly larger, a character of small importance in species of this and the allied genera.

ACRÆINÆ.

7. ACRÆA LYCIA.

Papilio lycia, Fabr. Syst. Ent. p. 464.

There are a number of examples in the collection of both sexes this very common African insect.

8. *ACRÆA DAIRA*, sp. n. (Plate XVII. fig. 3.)

Alis rosaceis extus fusco indistincte limbatis; anticis fascia transversa subapicali pallide rosaceo et maculis novem nigris notatis, una cellulari, altera ad finem ejus, quatuor in linea arcuata ultra eam, duabus inter ramos medianos ad angulum unalcum et una inter venas medianam et submedianam; posticis ad basin nigro maculatis et fascia macularum octo nigrarum margini externo subparallela notatis; subtus ut supra, alis inter venas ad marginem externum rubro notatis. Antennis nigris, palpis rosaceis apice nigro; thorace et prothorace fuscis rosaceo notatis, abdomine supra medialiter fusco.

Exp. 2·2 inches.

Hab. ad ripas fl. Niger (*W. A. Forbes*).

Mus. nostr.

Of this species Forbes's collection contains only a single specimen, but we have others, which are hardly distinguishable from it, from Zanzibar. Its nearest ally seems to be *A. lycia*, from which it differs at first sight by its more rufous tint, which colour also pervades the transverse subapical light spot of the primaries, so that it is hardly to be distinguished from the other markings of the wing.

9. *ACRÆA CÆCILIA*.

Papilio cæcilia, Fabr. Spec. Ins. ii. p. 34.

This is also a species of wide range in West Africa, whence it passes eastward to the White Nile.

10. *ACRÆA CALYCE*, sp. n. (Plate XVII. figs. 1, 2.)

♂. *Alis rosaceis, anticis interdum fuscis sed areæ apicali interna semper semihyalina; macula cellulari, aliis tribus (una ad cellulæ finem duabus infra eam in linea transversa positis) et quatuor ultra cellulam nigris; posticis dense (præcipue ad basin) nigro maculatis, margine externo nigro maculas rosaceas includente; subtus ut supra, sed anticis vitreo micantibus, posticis ad medium glaucescentibus. Antennis nigris, palpis omnino albido rosaceis; abdominis dimidio postico rubido.*

Exp. 2·3 inches.

Hab. ad ripas fl. Niger (*W. A. Forbes*); Cape Coast Castle, Dahomey.

Mus. nostr.

Several specimens of a species allied to *A. adnatha*, Hew., for which we have not been able to find a name. We have other examples from Cape Coast Castle and from Dahomey, showing that the species is probably far from uncommon in this region. The specimens vary a good deal *inter se*, the basal half of the primaries being more rufous in some specimens than in others. The rufous submarginal spots of the primaries also vary in distinctness.

11. *ACRÆA PSEUDEGINA*.

Acræa pseudegina, Westw. Gen. Diurn. Lep. p. 531.

Papilio egina, Stoll (nec Cram.), Suppl. Cram. t. 25. f. 3, 3 c.

A common species at Sierra Leone.

12. *ACRÆA LYCOA.*

Acræa lycoa, Godt. Enc. Méth. ix. p. 239.

A single broken specimen belonging to this species.

13. *ACRÆA VINIDIA.*

Acræa vinidia, Hew. Ent. Monthl. Mag. 1874, p. 130; Ex. Butt. *Acræa*, t. 7. f. 45, 46.

Four specimens in the collection, from Lukoja, seem to agree best with this species, as they have an isolated subapical fulvous spot on the primaries. But there are several closely allied forms, the characters of which are not very definite.

14. *ACRÆA SERENA.*

Papilio serena, Fabr. Syst. Ent. p. 461.

A common African species, having a very wide range.

NYMPHALINÆ.

15. *ATELLA EURYTIS.*

Atella eurytis, Doubl. Gen. Diurn. Lep. t. 22. f. 3.

Two examples of this very common insect.

16. *JUNONIA CLELIA.*

Papilio clelia, Cram. Pap. Exot. t. 21. f. E, F.

Junonia clelia, Trim. Rhop. Afr. Austr. p. 128.

Three specimens of this common African Butterfly.

17. *PRECIS TEREÆ.*

Papilio tereæ, Drury, Ill. Exot. Ent. t. 18. f. 3, 4.

A specimen in poor condition.

18. *PRECIS SOPHIA.*

Papilio sophia, Fabr. Ent. Syst. iii. p. 248; Donovan. Ins. Ind. t. 36. f. 3.

Two specimens.

19. *HYPANIS ILITHYIA.*

Papilio ilithyia, Drury, Ill. Nat. Hist. ii. t. 17. f. 1, 2.

Hypanis ilithyia, Trimen, Rhop. Afr. Austr. p. 214.

Two specimens of this very variable species.

20. *DIADEMA MISIPPUS.*

Papilio misippus, Linn. Mns. Ulr. p. 264.

Hypolimnas misippus, Aurivill. Kongl. Sv. Vet.-Ak. Handl. xix. No. 5, p. 71.

Two males of the ordinary form of this very widely distributed species

21. *DIADEMA ANTHEDON*.

Diadema anthedon, Doubl. Ann. & Mag. Nat. Hist. xvi. p. 181.

A male and female of the typical West-African form. The female differs from the male in having a large discal white patch divided by the nervures on the primaries, beyond which is a transverse row of white spots, and towards the apex two small white spots; the inner margin is black, and the distal half of the secondaries fuscous. The sexes, though obviously distinct in their markings, are not strongly contrasted as in *D. bolina*.

22. *NEPTIS AGATHA*.

Papilio agatha, Cram. Pap. Exot. t. 327. f. A, B.

Neptis melicerta (Fabr., nec Drury), Trimen. Rhop. Afr. Austr. p. 146.

Several specimens of this common species of *Neptis* are included in the collection.

23. *ROMALEOSOMA AGNES?*

Romaleosoma agnes, Butl. Trans. Ent. Soc. p. 672.

A male specimen, probably of this species, which is very closely allied to *R. medon* (Linn.).

The males of these two Butterflies are undistinguishable so far as we can see; but the female of *R. agnes*, upon which sex Mr. Butler founded his name, has a darker and more restricted purple patch to the secondaries than the female of *R. medon*. The former seems to be the prevalent form at Old Calabar and its vicinity, whilst the latter seems to be more common in Angola. On this account we have named Forbes's specimen *R. agnes*.

24. *HAMANUMIDA DÆDALUS*.

Papilio dædalus, Fabr. Syst. Ent. p. 482.

Papilio meleagris, Cram. Pap. Exot. t. 66. f. A, B.

Aterica meleagris, Trimen, Rhop. Afr. Austr. p. 157.

A widely ranging species, of which two specimens are in the collection.

25. *CHARAXES EPIJASIVS*.

Charaxes epijasivus, Reiche, Ferr. Gal. Voy. Abyss., Ent. p. 469, t. 32. f. 1, 2.

This species was described from Abyssinian specimens, but has been since traced to Senegal.

LYCÆNIDÆ.

26. *LYCÆNA HIPPOCRATES*.

Hesperia hippocrates, Fabr. Ent. Syst. iii. p. 288.

Papilio hippocrates, Donovan. Ins. Ind. t. 45. f. 3.

Two male specimens.

27. *LYCÆNA LINGEUS.*

Papilio lingeus, Cr. Pap. Ex. t. 379. f. F, G.

Lycæna lingeus, Trim. Rhop. Afr. Austr. p. 239.

Two specimens of this widely spread species.

28. *LYCÆNA KNYSNA.*

Lycæna knysna, Trim. Trans. Ent. Soc. ser. 3, i. p. 282; Rhop. Afr. Austr. p. 255.

Several specimens.

29. *LYCÆNA PRINCEPS.*

Lycænesthes princeps, Butl. Ann. & Mag. N. H. (4) xviii. p. 484.

Several specimens agreeing with others thus named in Capt. Shelley's collection. Mr. Butler's types came from Abyssinia.

30. *LYCÆNA PULCHRA.*

Lycæna pulchra, Murr. Trans. Ent. Soc. 1874, p. 524, t. 10. f. 7, 8.

Several specimens of both sexes, agreeing well with Mr. Murray's figures.

31. *LUCIA (?) DELEGORGUEI.*

Lycæna delegorguei, Boisd. in Delegorgue's Voy. dans l'Afr. austr. ii. p. 588.

Lucia (?) delagorguei, Trimen, Rhop. Afr. Austr. p. 280.

One damaged specimen apparently of this species.

Mr. Kirby, probably following a suggestion of Mr. Butler's, refers this name to *Hesperia bibulus*, Fabr., but Donovan's representation of this insect is hardly intelligible.

32. *PITHECOPS (?) ELOREA.*

Papilio elorea, Fabr. Ent. Syst. iii. p. 194; Donovan. Nat. Rep. ii. t. 53.

Pithecopis elorea, Butl. Cat. Fabr. Diurn. Lep. p. 161.

Mr. Butler has placed this species in *Pithecopis*, and we follow him in so doing. A close examination of its structure, however, is required to determine its true position. There is considerable individual variation in the width of the dark margin of the secondaries. Forbés's specimens all have this margin comparatively broad.

33. *CIGARITIS AMINE.*

Cigaritis amine, Butl. Trans. Ent. Soc. 1874, p. 533, t. 11. f. 1, 2.

A single specimen of this pretty species, which Mr. Butler described from examples taken at Whydah on the Gold Coast.

34. *MYRINA NOMENIA.*

Myrina nomenia, Hew. Trans. Ent. Soc. 1874, p. 353; Ill. Diurn. Lep., Suppl. p. 25, t. iii. b. f. 105, 106.

One damaged specimen of this species.

35. *DEUDORIX*, sp.

A single specimen of a species apparently of this genus. We have not been able to find a name for it; but do not describe it from such scanty materials.

PAPILIONIDÆ.

PIERINÆ.

36. *PONTIA ALCESTA*.

Papilio alcesta, Cr. Pap. Ex. t. 379. f. A.

Pontia alcesta, Trim. Rhop. Afr. Austr. p. 26.

Several specimens, agreeing with others from West and South Africa.

37. *TERIAS*, sp.

Terias rahel, Trim. Rhop. Afr. Austr. p. 76 (nec Fabricius).

Several specimens of this species, to which we have not been able to attach a name. It is evidently the *T. rahel* of Mr. Trimen's work, but not the species so named by Fabricius, as Mr. Butler has pointed out (Cat. Fabr. Diurn. Lep. p. 227). It has close allies in *T. pulchella* of Madagascar, and *T. floricola* of Eastern Africa.

38. *TERIAS BRIGITTA*.

Papilio brigitta, Cr. Pap. Ex. t. 331. f. B, C.

Terias brigitta, Trim. Rhop. Afr. Austr. p. 80.

Forbes's three specimens agree well with Cramer's figure of this species.

39. *TERIAS*, sp.

Several specimens, which resemble *T. senegalensis*, Hübn.; but we hesitate to pronounce them identical, the colour of the upperside being paler and the markings of the underside very much less distinct. *T. desjardinsii* is another allied South-African species.

40. *PIERIS CALYPSO*.

Papilio calypso, Drury, Ill. Nat. Hist. ii. p. 29, t. 17. f. 3, 4.

Pieris calypso, Trim. Rhop. Afr. Austr. p. 38.

A well-known West-African species, of which Forbes's collection contains several examples.

41. *PIERIS CREONA*.

Papilio creona, Cr. Pap. Exot. t. 95. f. C-F.

Pieris creona, Trim. Rhop. Afr. Austr. p. 31.

This is another common African *Pieris*, of which Forbes's collection contains a pair.

42. *TACHYRIS CHLORIS*.

Papilio chloris, Fabr. Syst. Ent. p. 473.

Pieris chloris, Trim. Rhop. Afr. Austr. p. 28.

A pair.

43. TACHYRIS SABA.

Papilio saba, Fabr. Sp. Ins. ii. p. 46.

A pair of this species, agreeing with our series of West-African examples.

44. CALLIDRYAS PYRENE.

Colias pyrene, Sw. Zool. Ill. ser. 1, t. 51.

Callidryas pyrene, Butl. Lep. Ex. t. 16. f. 8, 9, 10.

Callidryas florella, Boisd. Sp. Gén. i. p. 608 (nec Fabr. apud Butler).

A single male specimen, which, according to Mr. Butler, should bear this name.

45. TERACOLUS EVIPPE.

Papilio evippe, Linn. Mus. Ulr. p. 239.

Callosune evippe, Auriv. Kongl. Sv. Vet.-Ak. Handl. xix. No. 5, p. 52.

A male example.

PAPILIONINÆ.

46. PAPILIO DEMOLEUS.

Papilio demoleus, Linn. Mus. Ulr. p. 214; Auriv. Kongl. Sv. Vet.-Ak. Handl. xix. No. 5, p. 33.

Several specimens of this common African species.

47. PAPILIO PYLADES.

Papilio pylades, Fabr. Ent. Syst. iii. p. 34; Donovan. Nat. Rep. i. t. 13; Trim. Rhop. Afr. Austr. p. 22.

Forbes's single specimen resembles Donovan's figure except that the dark costal border of the primaries near the base is broader and there is no red spot at the anal angle of the secondaries. The species is a variable one, and we agree with Mr. Trimen that it cannot be satisfactorily divided.

48. PAPILIO MEROPE.

Papilio merope, Cr. Pap. Ex. t. 378. f. D, E; Trim. Trans. Linn. Soc. xxvi. p. 506 et seq.

Papilio hippocoon, Fabr. Syst. Ent. iii. p. 38; Hew. Ex. Butt. Pap. t. 12. f. 38.

Forbes's collection contains three specimens of this species, two males and one female. The former agree with Sierra-Leone examples, which should be considered the typical *P. merope*, Cr. The female is like typical *P. hippocoon*, Fabr., from the same country. This form of female has a wide range in Africa, extending to the Cape Colony (Trimen) and in East Africa to Zanzibar.

HESPERIDÆ.

49. PYRGUS VINDEX.

Papilio vindex, Cr. Pap. Ex. t. 353. f. G, H.

Pyrgus vindex, Doubl. & Hew. Gen. Diurn. Lep. t. 79. f. 6;
Trim. Rhop. Afr. Austr. p. 287.

A single specimen.

50. PAMPHILA BORBONICA.

Hesperia borbonica, Boisd. Faun. Mad. p. 65, t. 9. f. 5, 6.

Pamphila borbonica, Trim. Rhop. Afr. Austr. p. 303.

Two specimens.

HETEROCERA. By H. DRUCE.

AGARISTIDÆ.

1. *ÆGOCERA LATREILLII*, Herrich-Schäffer, Aussl. Schmett.
t. 5. fig. 19.

Ægocera magna, Walk. Cat. i. p. 56.

2. *ÆGOCERA RECTILINEA*, Boisd. Spec. gén. Léop. i. t. 14.
fig. 5.

ARCTIDÆ.

3. *ALOA PUNCTIVITTA*, Walk. Cat. iii. p. 673.

The specimens agree well with the type in the British Museum from South Africa.

NYCTEMERIDÆ.

4. *ALETIS FORBESI*, sp. n. (Plate XVII. fig. 4.)

Pale chrome yellow; primaries with the apical third black, including a transverse white patch and two posterior white spots. Secondaries with a narrow marginal black band, which includes seven elongated white spots. Antennæ of male black, deeply pectinated. The thorax I believe to be black, but it is so much rubbed that I cannot be certain upon this point. Abdomen yellow, with the segments banded with black. Legs yellow. The undersides the same as above. The female agrees in all respects with the male, except that the antennæ are not pectinated. Expanse $1\frac{3}{4}$ inch.

A small species, very distinct from any described. I have had two specimens in my collection for some time, one from Old Calabar and the other from the Cameroons: they agree in all respects with those from the Niger. The Cameroons example is a female; it is rather larger, measuring nearly two inches across the wings.

LITHOSIIDÆ.

5. *DEIOPEIA PULCHELLA*, Linn. Syst. Nat. i. 2. 884, 349.

LIPARIDÆ.

6. *DASYCHIRA CRAUSIS*, sp. n. (Plate XVII. fig 5.)

♀. Primaries—the ground-colour chrome-yellow, very thickly powdered with minute black spots excepting at the apex, and the outer margin crossed by four irregular bands of orange-red—the first close to the base and nearly straight, the second curved, the third broad and almost broken into three spots, the fourth very much curved near the apex; between the third and fourth bands, at the end of the cell, is a large red spot. Secondaries uniform chrome-yellow, the fringe yellow. Head and palpi yellow, tipped with black; antennæ somewhat deeply pectinated, brownish black. Thorax and abdomen I believe to be yellow banded with black, but the specimen being much rubbed in these parts I cannot be certain about the black bands. Legs yellow; the tarsi black. The underside uniform chrome-yellow, with an indistinct black mark at the end of the cell of both the primaries and secondaries. Expanse $1\frac{3}{4}$ inch.

This species is allied to *D. gentilis*, Butler, from Madagascar; but it is a much smaller insect and very distinct. A specimen, in very bad condition, of what I believe to be the male of this species is in the British-Museum collection from Old Calabar.

NOTODONTIDÆ.

7. *ORÆSIA*, sp. ?

A specimen of a species very closely allied to *O. alliciens*, Walk., from which it differs in having the primaries much paler and without the transverse lines. As only a single example was obtained, and the species of this genus are subject to slight variation, I think it better not to name this insect without seeing more specimens.

LIMACODIDÆ.

8. *PARASA*, sp. ?

A specimen in very poor condition belonging to this genus.

BOMBYCIDÆ.

9. *PACHYGASTRIA NIRIS*, sp. n. (Plate XVIII. fig. 6.)

Uniform reddish brown; primaries with a minute white spot, edged with black, at the end of the cell, two transverse narrow black bands crossing the wing beyond the middle; secondaries rather paler at the base, crossed at the middle by a very faint black line. Underside paler and with the black lines more defined. Expanse $1\frac{1}{2}$ inch.

This species is allied to *P. reducta*, Walk., from the Zulu Country, South Africa.

XYLOPHASIDÆ.

10. *SPODOPTERA CAPICOLA*, Herr.-Schäf. Exot. Schmett. t. 27. fig. 131.

APAMEINÆ.

11. *APAMEA NATALENSIS*, Butler, Ann. & Mag. Nat. Hist. ser. iv. vol. xvi. p. 403.

A very broken example of this species.

XYLINIDÆ.

- 12.
- EPIMECIA ÆNIGMA*
- , Feld. Lep. Nov. t. 108. f. 47.

A single example of this species in very poor condition was sent.

TOXOCAMPIDÆ.

- 13.
- TOXOCAMPA*
- , sp. ?

A specimen of a species very close to *T. salax*, Guén., from which it chiefly differs by wanting the black collar of that species. It is not in good condition; I therefore think it better not to describe it.

OPHIDERIDÆ.

- 14.
- OPHIDERES MATERNA*
- , Linn. Syst. Nat. ii. 840. 117.

EUCLIDIDÆ.

- 15.
- CHALCIOPE DELTIFERA*
- , Feld. Lep. Nov. t. 117. fig. 24.

Two specimens in bad condition, agreeing well with Dr. Felder's figure.

REMIGIDÆ.

- 16.
- REMIGIA PELLITA*
- , Guén. Noct. iii. p. 318.

THERMESIDÆ.

- 17.
- THERMESIA*
- , sp. ?

A single example of a species belonging to this genus.

HYPENIDÆ.

- 18.
- HYPENA CONSCITALIS*
- , Walk. Cat. xxxiv. p. 1509.

A poor example, agreeing well with Walker's type in the British Museum.

- 19.
- HYPENA ECHEONALIS*
- , Walk. Cat. xvi. p. 230.

ASOPIDÆ.

- 20.
- DESMIA*
- ?

A single example in very bad condition belonging to this genus.

- 21.
- HYMENIA FASCIALIS*
- , Stoll, Cram. Pap. Exot. v. t. 36. fig. 13.

The collection contains examples of three or four other species; but the specimens are in such bad condition, it is quite impossible to identify them.

EXPLANATION OF PLATE XVII.

- Fig. 1. *Acræa calyce*, ♂, p. 221.
 2. — — —, ♀, p. 221.
 3. — *daira*, p. 221.
 4. *Alctis forbesi*, p. 227.
 5. *Dasychira crausis*, p. 228.
 6. *Pachygastris niris*, p. 228.